

What is claimed is:

1. A method of treating an infection caused by bacterial cells located on a surface of a foreign body over and around which fibrin has been deposited, the foreign body being present in a subject, which comprises administering to the subject an agent capable of inhibiting signalling mediated by a β_1 integrin cell surface receptor of leukocyte cells in an amount effective to enhance the migration of leukocyte cells into or through the fibrin so as to permit the leukocyte cells to reach and kill the bacterial cells and thereby treat the infection.
2. The method of claim 1, wherein the foreign body is a prosthetic device.
3. The method of claim 1, wherein the foreign body is a catheter.
4. The method of claim 1, wherein the foreign body is a suture.
5. The method of claim 1, wherein the subject is a mammal.
6. The method of claim 5, wherein the mammal is a human.
7. The method of claim 1, wherein the leukocyte cells are polymorphonuclear leukocyte cells.
8. The method of claim 7, wherein the polymorphonuclear leukocyte cells are neutrophils.
9. The method of claim 7, wherein the polymorphonuclear

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leukocyte cells are basophils.

10. The method of claim 7, wherein the polymorphonuclear leukocyte cells are eosinophils.

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11. The method of claim 1, wherein the leukocyte cells are monocytes.

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12. The method of claim 1, wherein the leukocyte cells are macrophages.

13. The method of claim 1, wherein the agent is a peptide.

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14. The method of claim 13, wherein the peptide contains a β_1 integrin-binding domain.

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15. The method of claim 14, wherein the peptide comprises GRGDSP.

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16. The method of claim 1, wherein the agent is an antibody or a fragment thereof that specifically binds to the β_1 integrin cell surface receptor of leukocyte cells.

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17. A method of preventing a chronic infection from occurring due to the presence of bacterial cells on a surface of a foreign body in a subject, which comprises coating the foreign body before placing it in the subject with a fibrinolytic agent capable of preventing the accumulation of fibrin on the surface of the foreign body so as to permit leukocyte cells to reach and kill any bacterial cells present on the surface of the foreign body and thereby prevent the chronic infection.

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18. The method of claim 17, wherein the foreign body is

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a prosthetic device.

19. The method of claim 17, wherein the foreign body is a catheter.

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20. The method of claim 17, wherein the foreign body is a suture.

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21. The method of claim 17, wherein the subject is a mammal.

22. The method of claim 21, wherein the mammal is a human.

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23. The method of claim 17, wherein the fibrinolytic agent is a plasminogen activator.

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24. The method of claim 23, wherein the plasminogen activator is urokinase.

25. The method of claim 23, wherein the plasminogen activator is streptokinase.

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26. The method of claim 23, wherein the plasminogen activator is tissue plasminogen activator.

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27. A method of treating a malignant tumor comprising of malignant tumor cells over and around which tenascin has been deposited, the malignant tumor being present in a subject, which comprises administering to the subject an agent capable of inhibiting signalling mediated by a β_1 integrin cell surface receptor of leukocyte cells in an amount effective to enhance the migration of leukocyte cells through the tenascin so as to permit the leukocyte cells to reach and kill the malignant tumor cells and thereby treat the malignant tumor.

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28. The method of claim 27, wherein the subject is a mammal.
- 5 29. The method of claim 28, wherein the mammal is a human.
30. The method of claim 27, wherein the leukocyte cells are polymorphonuclear leukocyte cells.
- 10 31. The method of claim 30, wherein the polymorphonuclear leukocyte cells are neutrophils.
32. The method of claim 30, wherein the polymorphonuclear leukocyte cells are basophils.
- 15 33. The method of claim 30, wherein the polymorphonuclear leukocyte cells are eosinophils.
- 20 34. The method of claim 27, wherein the leukocyte cells are monocytes.
35. The method of claim 27, wherein the leukocyte cells are macrophages.
- 25 36. The method of claim 27, wherein the leukocyte cells are lymphocyte cells.
37. The method of claim 36, wherein the lymphocyte cells are NK cells.
- 30 38. The method of claim 36, wherein the lymphocyte cells are Killer cells.
- 35 39. The method of claim 27, wherein the agent is a peptide.

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40. The method of claim 39, wherein the peptide contains a β_2 integrin-binding domain.

11. The method of claim 40, wherein the peptide comprises GRGDSP.

42. The method of claim 27, wherein the agent is an antibody or a fragment thereof that specifically binds to the β_1 integrin cell surface receptor of leukocyte cells.

13. A method of treating a chronic inflammation in a subject caused by an increase in the number of leukocyte cells present at the site of the chronic inflammation which comprises administering to the subject an agent capable of stimulating signalling mediated by a β integrin cell surface receptor of leukocyte cells in an amount effective to inhibit the migration of leukocyte cells toward the site of the chronic inflammation so as to reduce the number of leukocyte cells present at the site and thereby treat the chronic inflammation.

44. The method of claim 43, wherein the subject is a mammal.

45. The method of claim 44, wherein the mammal is a human.

46. The method of claim 43, wherein the leukocyte cells are polymorphonuclear leukocyte cells.

47. The method of claim 46, wherein the polymorphonuclear leukocyte cells are neutrophils.

48. The method of claim 46, wherein the polymorphonuclear leukocyte cells are basophils.

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